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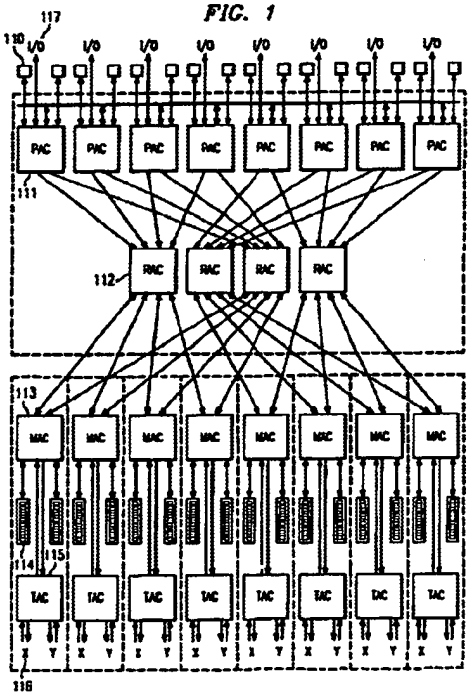
(54) Dynamic allocation of buffer space between requests and responses

(57) The space of a buffer 201 is logically partitioned into space reserved for requests only, space reserved for responses only, and space that can be used for either requests or responses, i.e., dynamically usable as needed by the system. An arbiter 301 uses three registers to keep track of the request buffer space 302, the response buffer space 303 and the dynamic space 304. The arbiter compares each of the registers with a corresponding limit 307, 308, and 309, to determine if a request packet or a response packet should be sent to the buffer. The limits are set by software and define the maximum number of request products, response packets, and total number of packets the buffer can hold. For example, the limit may be set to eight requests, eight responses and ten total. Thus two spaces are reserved for requests and two spaces are reserved for responses, and six are dynamically usable.

FIG. 1



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